ORDER NO. AED9809013

Service Manual

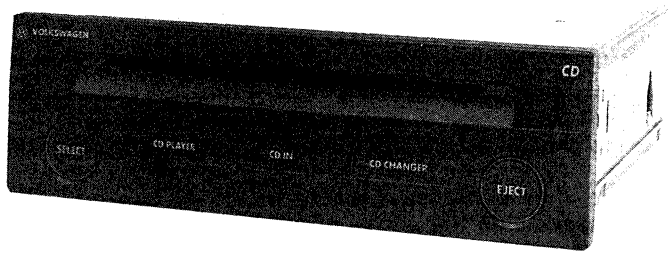
AUTOMOTIVE ELECTRONICS

V.W.

VEHICLE	DESTINATION	PRODUCED AFTER	V.W. PART NO.	MATUSHITA MODEL NO.
V.W.	EUROPE	Sep., 1998	1J0 035 119	CX-DV1820L

COMPACT disc DIGITAL AUDIO

CD player



FEATURES

- 1 DIN CD Player.
- CD Changer selecting function.
- CD loading indicator.

Specifications*

Power Supply	: DC 12V(11V - 16V), Test Voltage 14.4V Negative Ground
Current Consumption	: 0.4A
Output Impedance	: 47kΩ // 1000pF
Maximum Output Voltage	: 1.9V
Total Harmonic Distortion	: less than 0.02%
Signal to Noise Ratio	: more than 90dB
Channel Separation	: more than 80dB

Dimensions**	: 178(W)×50(H)×162(D)mm
Weight**	: 1.5kg

* Specifications and the design are subject to posible modification without notice due to improvements in technology.

** Dimensions and Weight showm are approximate.

⚠WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced proffesional technicians. Any attempt to service or repair the product or producs dealt with in this service information by anyone else could result in serious injury or death.

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Panasonic

(Recycle Paper)

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LASER PRODUCTS

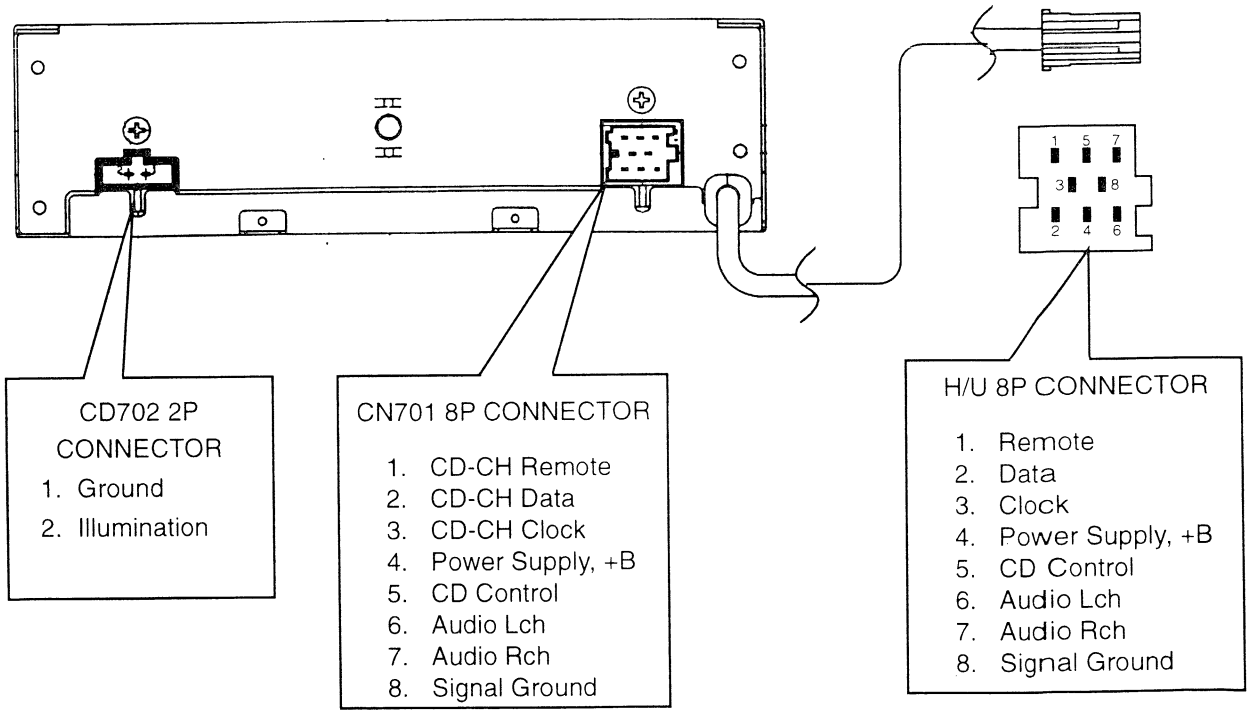
Caution
This product utillzes a laser.
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Laser products:

Wave Length	780nm
Laser power	No hazardous radiation is emitted with safety protection.

Do not take apart this unit or attempt to make any changes yourself.
This unit is very intricate that uses a laser pickup to retrieve information from the surface of compact discs.
The laser is carefully shielded so that its rays remain inside the cabinet.
Therefore, never try to disassemble the player or alter any of its parts since you may be exposed to laser rays and dangerous voltages.

REAR VIEW AND CONNECTORS

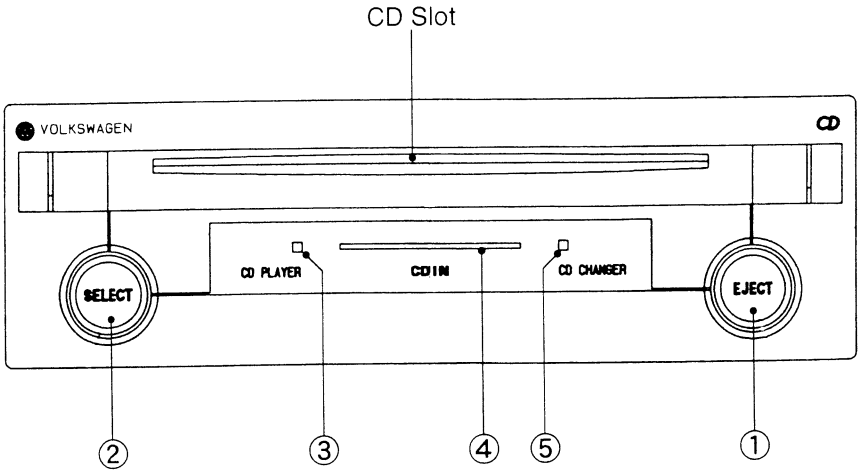


CD702 2P CONNECTOR
1. Ground
2. Illumination

CN701 8P CONNECTOR
1. CD-CH Remote
2. CD-CH Data
3. CD-CH Clock
4. Power Supply, +B
5. CD Control
6. Audio Lch
7. Audio Rch
8. Signal Ground

H/U 8P CONNECTOR
1. Remote
2. Data
3. Clock
4. Power Supply, +B
5. CD Control
6. Audio Lch
7. Audio Rch
8. Signal Ground

NAME AND FUNCTION OF EACH PARTS



OPERATION OF CONTROL

1. CD IN INDICATOR

	Working
1	• "CD IN" indicator ④ lights when CD disc is inserted into the CD disc slot.

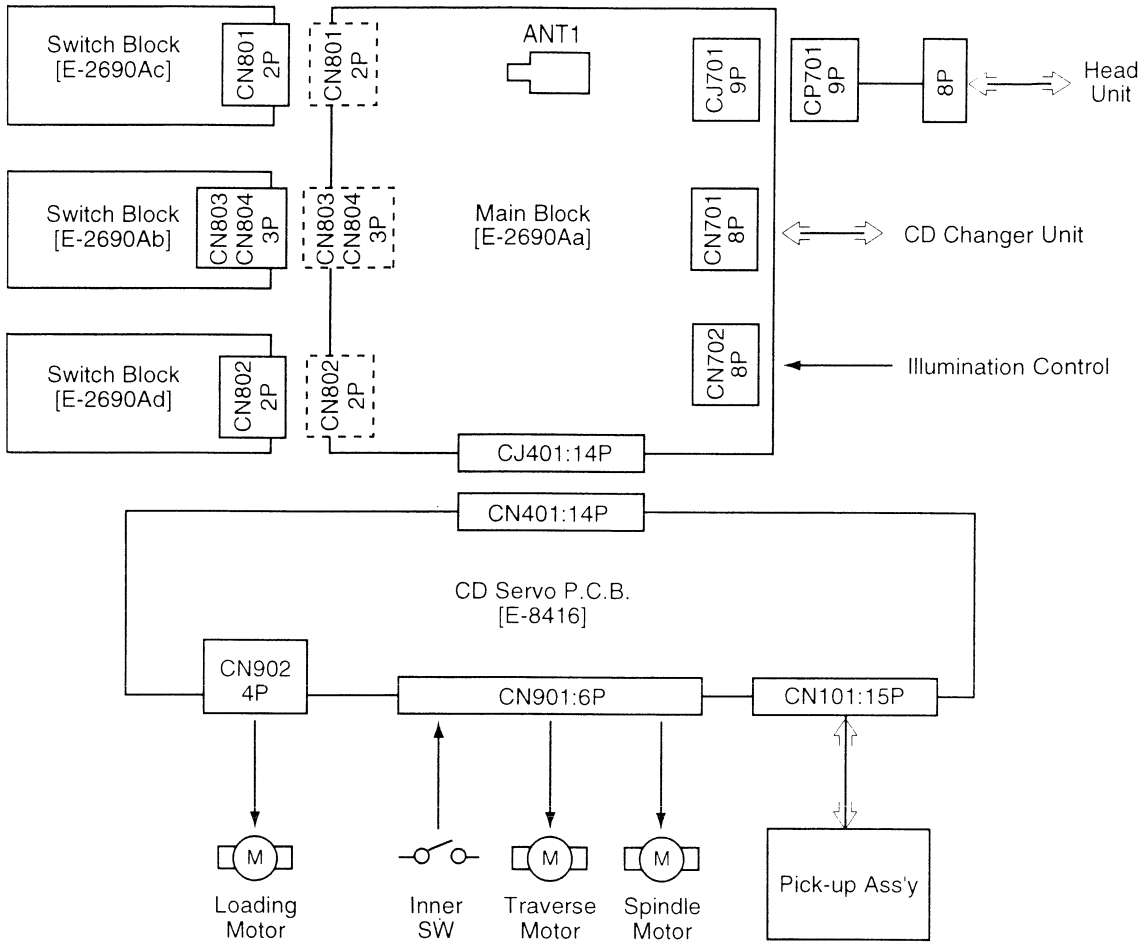
2. EJECT

	Operation	Working
1	• Depress the EJECT button ①.	• CD disc eject and "CD IN" indicator goes off.

3. SELECT

	Operation	Working
1	• Depress the SCAN button ②.	• When CD disc is inserted into CD player, "CD PLAYER" indicator ③ lights and the play starts. • When CD magazine is inserted into CD changer, "CD CHANGER" indicator ⑤ lights and the play starts.

WIRING CONNECTION

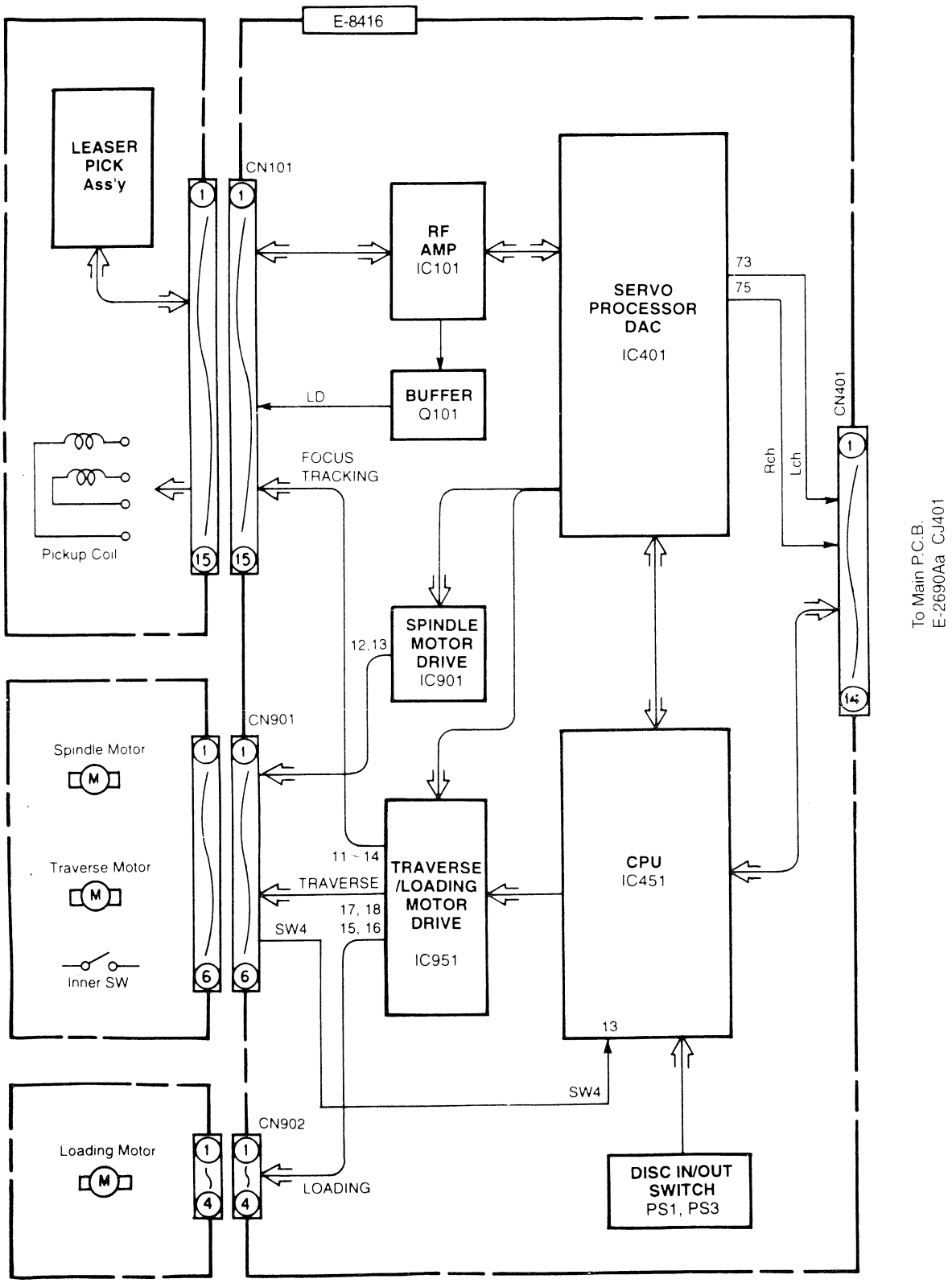


<Note> :

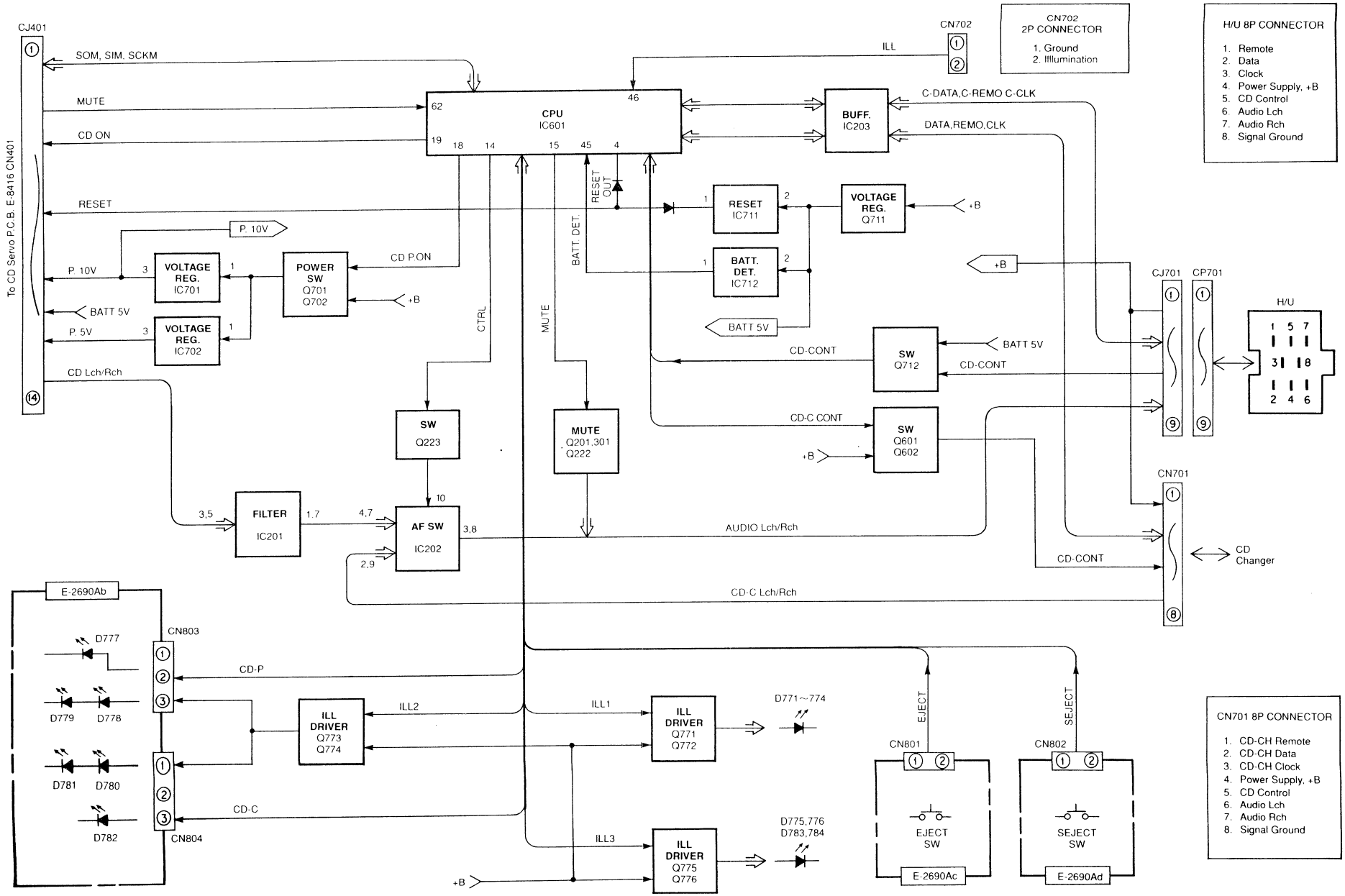
□ ·····This mark shows a Ref. No. of connector

[ ] ·····This mark shows a mounting position of connector.

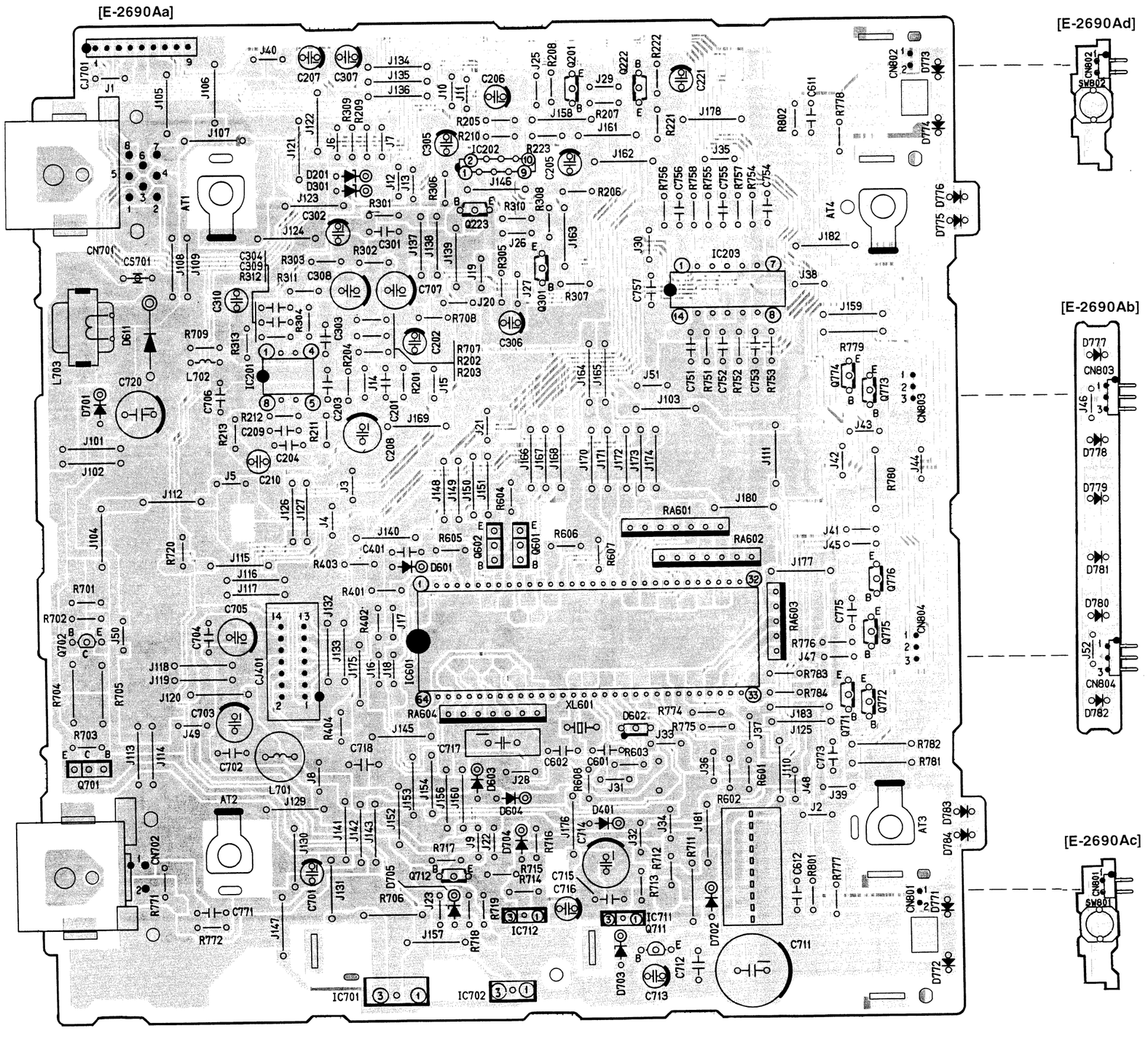
BLOCK DIAGRAM (CD Servo Block) MODEL CX-DV1820L



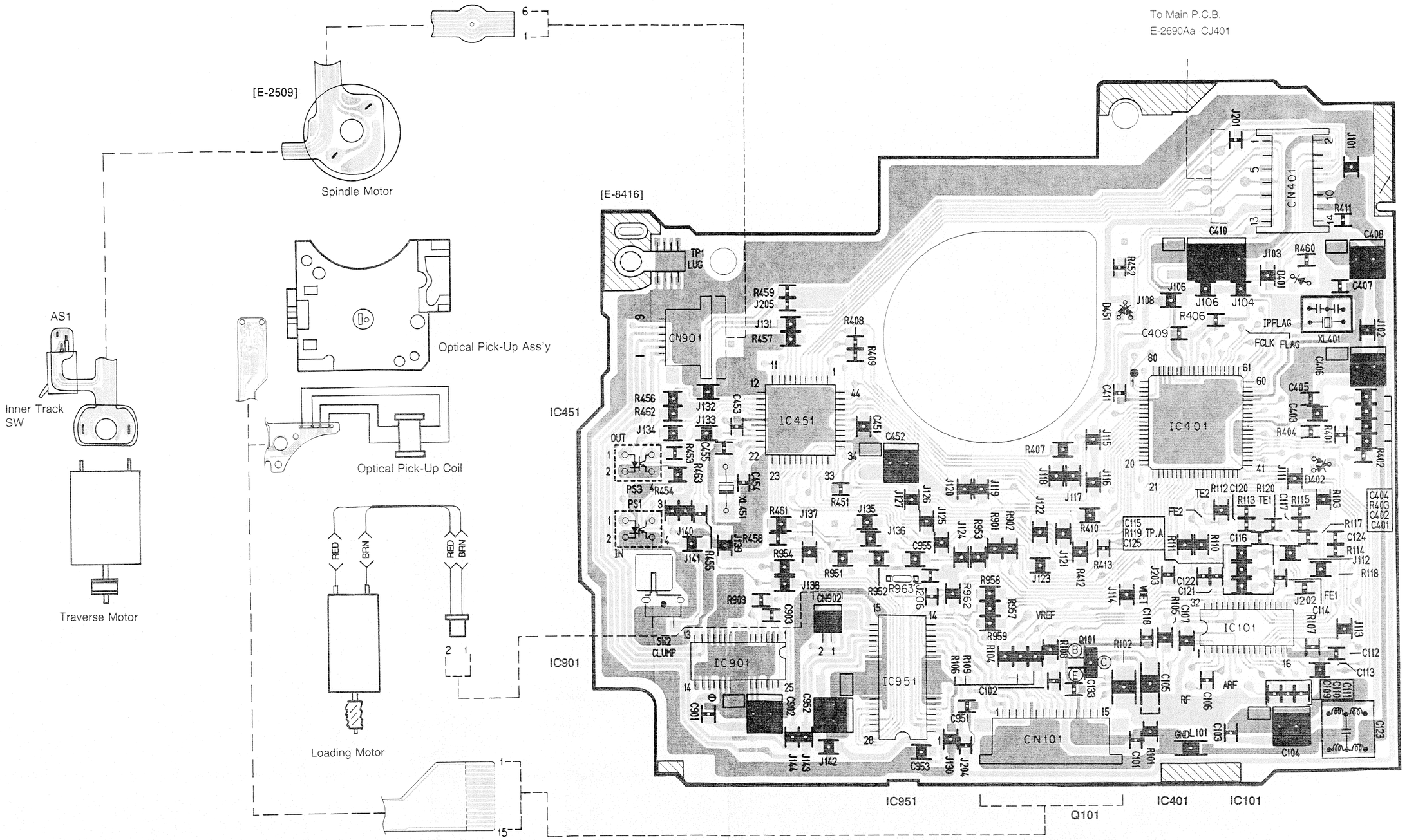
BLOCK DIAGRAM (Main Block) MODEL CX-DV1820L



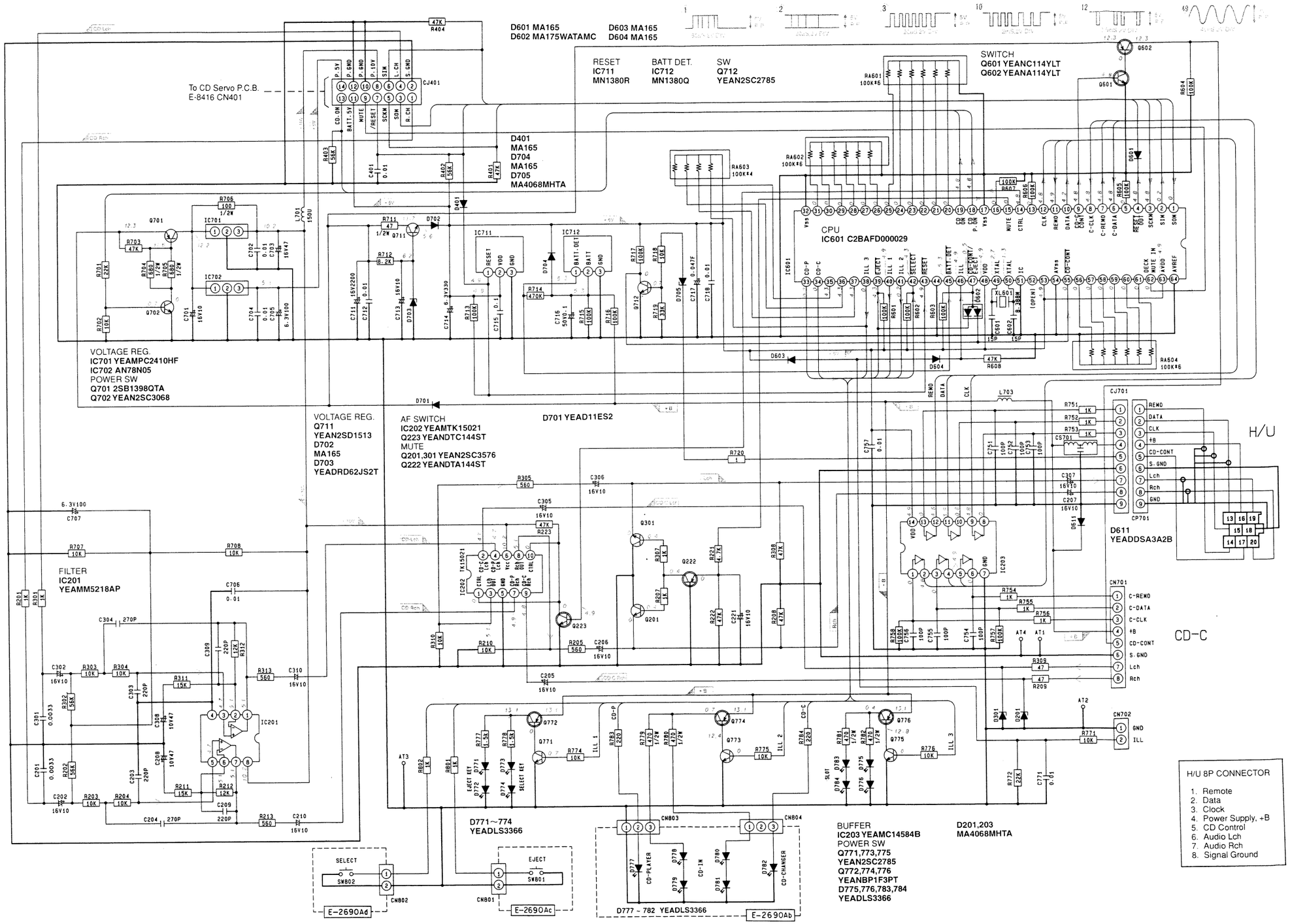
WIRING DIAGRAM (Main Block) MODEL CX-DV1820L



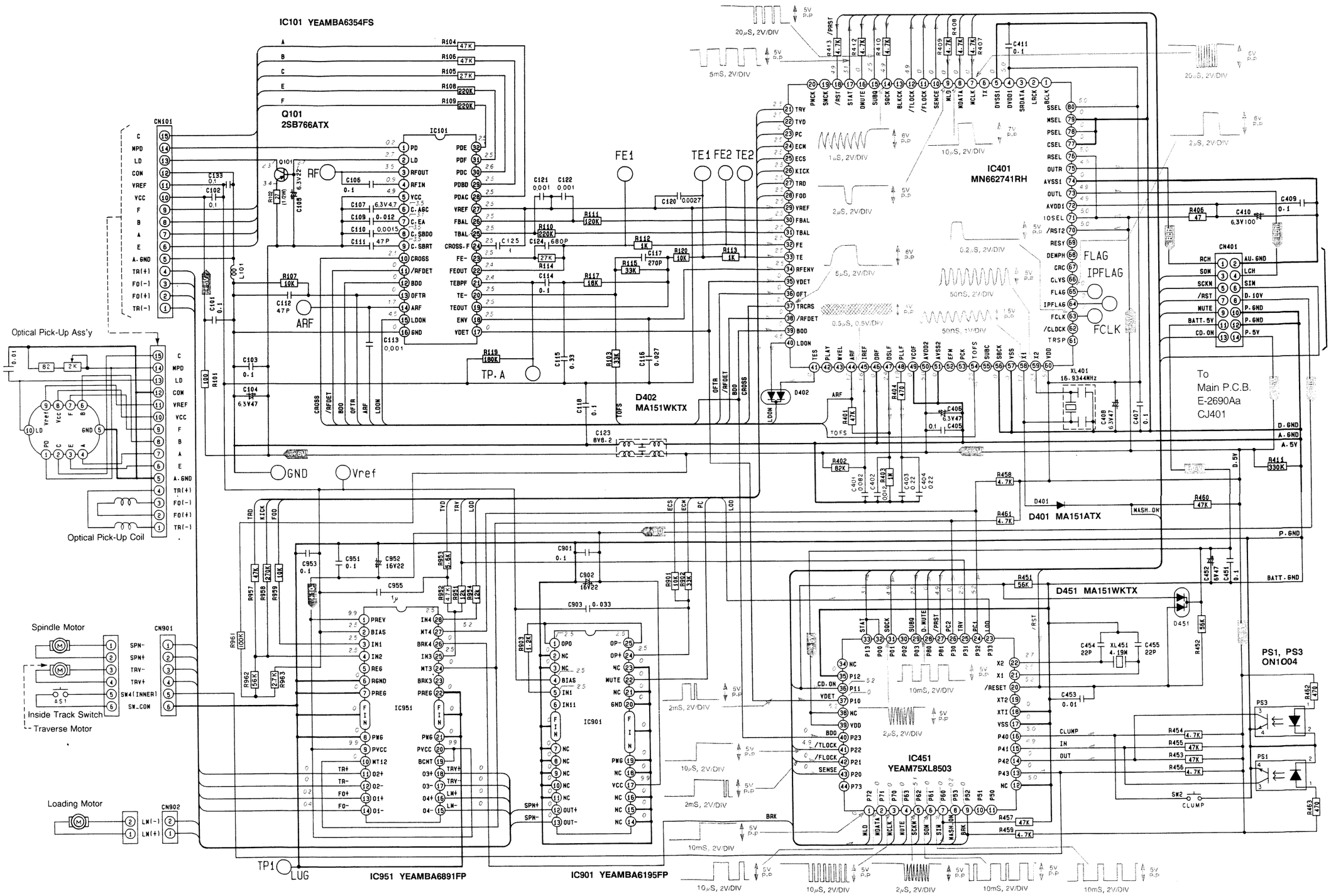
WIRING DIAGRAM (CD Servo Block) MODEL CX-DV1820L



SCHEMATIC DIAGRAM (Main Block) MODEL CX-DV1820L



SCHEMATIC DIAGRAM (CD Servo Block) MODEL CX-DV1820L



TERMINALS DESCRIPTION

<Main Block>

■ IC601 C2BAFD000029

Pin No.	Port	Description	I/O	Vol.(V)
1	SOM	CD communication data	I	0
2	SIM	CD communication data	O	0.2
3	SCKM	CD communication clock	I	4.8
4	/RESET	Reset output	O	4.8
5	—	(Ground pull-down)	—	0
6	C-DATA	CD-CH data	I	4.8
7	C-REMO	CD-CH remote	O	4.8
8	C-CLK	CD-CH clock	I	4.8
9	CD.C CNT	CD-CH control	O	4.8
10	DATA	CD-CH data	O	4.2
11	REMO	CD-CH remote	I	4.9
12	CLK	CD-CH clock	O	4.8
13	—	(Ground pull-down)	—	0
14	CTRL	Audio signal selection	O	4.8
15	MUTE	Mute input	I	0
16	—	(Ground pull-down)	—	0
17	V_{SS}	Ground	—	0
18	CD P.ON	CD power on signal	O	4.8
19	CD ON	CD power control	O	4.8
20~25	—	(Ground pull-down)	—	0
26~31	—	(Ground pull-down)	—	0
32	V_{SS}	Ground	—	0
33	CD-P	CD-PLAYER LED control	O	0.2
34	CD-C	CD-CHANGER LED control	O	0
35~37	—	(+5V pull-up)	—	4.3
38	ILL 3	Illumi. control	O	0
39	/EJECT	Eject switch input	I	4.3
40	ILL 1	Illumi. control	O	4.9
41	ILL 2	Illumi. control	O	0.2
42	/SELECT	Select switch input	I	4.3
43	/RESET	Reset input	I	4.9
44	—	(Connecting to ground)	—	0
45	/BATT. DET	Battery level detection	I	5.3
46	ILL	Illumi. control	I	4.9
47	/CD.CNT.EJ	CD control/Eject input	I	0.5
48	V_{DD}	+5V power supply	—	4.9
49	XTAL	Crystal oscillator	—	2.7
50	XTAL	Crystal osciilator	—	1.3
51	IC	(Connecting to ground)	—	0
52	—	No connecting	—	—
53	—	+5V power supply	—	4.9
54	AV_{SS}	Analog ground	—	0
55	/CD-CNT	CD control input	I	0
56~61	—	(Ground pull-down)	—	0
62	MUTE IN	Mute input	I	0
63	AV_{DD}	+5V power supply	—	4.9
64	AV_{REF}	(Connecting to ground)	—	0

<CD Servo Block>

■ IC451 YEAM75XL8503

Pin No.	Port	Description	I/O	Vol.(V)
1	MLD	I/F communication load output	O	0
2	MDATA	I/F communication data output	O	0
3	MCLK	I/F communication clock output	O	0
4	MUTE	Mute output	O	0
5	SCKM	CD communication clock	O	5.1
6	SOM	CD communication data output	O	0
7	SIM	CD communication clock output	I	0
8	MASH ON	MASH on output	O	0.2
9	BRK	Loading motor brake	O	0
10,11	NC	No connection	—	—
12	NC	(Connection to ground)	—	0
13	P43	Inner track SW	I	0
14	OUT	CD eject complation SW	I	0
15	IN	DISC IN SW	I	4.9
16	CLUMP	Clump completion SW	I	5.0
17	V_{SS}	Ground	—	0
18	XT1	(Connection to ground)	—	0
19	XT2	No connection	—	—
20	RESET	Reset input	I	5.2
21	X1	Crystal oscillator	—	2.5
22	X2	Crystal oscillatot	—	2.7
23	LOD	Loading motor control	O	2.5
24	PC1	Gain control	O	5.0
25	TRV	Forced traverse control	O	2.5
26	PC2	Gain control	O	0
27	/PRST	Reset input	I	4.9
28	DMUTE	Digital LSI mute	O	0
29	SUBQ	Q-code data	I	2.5
30	—	No connection	—	—
31	SQCK	Q-code clock	O	4.9
32,33	STAT	Signal process LSI status	I	3.1
34	NC	No connection	—	—
35	P12	(Connecting to ground)	—	0
36	CD.ON	MPU on/off status	I	5.2
37	VDET	Viblation detection	I	0
38	NC	+5V power supply	—	5.2
39	V_{DD}	+5V power supply	—	5.2
40	BDO	Drop out signal	I	0
41	/TLOCK	Tracking servo lock detection	I	4.9
42	/FLOCK	Focus servo lock detection	I	0
43	SENSE	Servo LSI status	I	0
44	P73	No connection	—	—

TERMINALS DESCRIPTION

<CD Servo Block>

■ IC401 MN662741RH

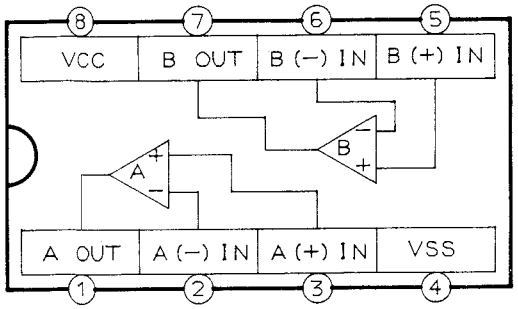
Pin No.	Port	Description	I/O	Vol.(V)
1	BLCK	Not used	—	—
2	LRCK	Not used	—	—
3	SRDATA	Not used	—	—
4	DVDD1	+5V Power Supply for Digtal	—	5.0
5	DVSS1	Ground for Digtal	—	0
6	TX	Not used	—	—
7	MCLK	Command Clock Signal	I	0
8	MDATA	Command Data	I	0
9	MLD	Command Load	I	0
10	SENSE	Sense Signal	O	0
11	/FLOCK	Focus Servo	O	0
12	/TLOCK	Tracking Servo	O	4.9
13	BLKCK	Not used	—	—
14	SQCK	EX-Clock for Subcode Q	I	4.9
15	SUBQ	Sugcord Q-code	O	2.5
16	DMUTE	Muting	I	0
17	STAT	Status Signal	O	3.1
18	/RST	Reset Input	I	4.9
19	SMCK	Not used	—	—
20	PMCK	Not used	—	—
21	TRV	Traverse Motor Control	O	2.5
22	TVD	Traverse Motor Control	O	2.5
23	PC	Spindle Motor ON	O	0
24	ECM	Spindle Motor Drive	O	2.5
25	ECS	Spindle Motor Drive	O	2.5
26	KICK	Kick Pulse	O	2.5
27	TRD	Tracking Drive	O	2.5
28	FOD	Focus Drive	O	2.5
29	VREF	Reference Voltage	I	2.5
30	FBAL	Focus Balance	O	2.5
31	TBAL	Tracking Balance	O	2.5
32	FE	Focus Error	I	2.5
33	TE	Tracking Error	I	2.5
34	RFENV	RF Envelope	I	2.5
35	VDET	Detecting Signal	I	0
36	OFT	OFF Track Signal	I	0
37	TRCRS	Track Close	I	2.1
38	/RFDET	RF Detecting Signal	I	0
39	BDO	Drop-out Signal	I	0
40	LDON	Laser ON Signal	O	4.5

Pin No.	Port	Description	I/O	Vol.(V)
41	TES	Tracking Error Shunt	O	0
42	PLAY	Not used	—	—
43	WVEL	Not used	—	—
44	ARF	RF Signal	I	1.7
45	IREF	Reference Current Input	I	1.6
46	DRF	Blas for DSL	I	0
47	DSLF	Loop Filter for DSL	I/O	2.4
48	PLLF	Loop Filter for PLL	I/O	1.8
49	VCOF	(Connecting Ground)	—	0
50	AVDD2	Power Supply for Analog	—	5.0
51	AVSS2	Ground for Analog	—	0
52	EFN	Not used	—	—
53	PCK	Not used	—	—
54	TOFS	Tracking offset	O	2.5
55	SUBC	Not used	—	—
56	SBCK	(Connecting Ground)	—	0
57	VSS	Ground	—	0
58	X1	Crystal oscillator	I	1.7
59	X2	Crystal oscillator	O	2.3
60	VDD	+5V Power Supply	—	5.0
61	TRSP	Not used	—	—
62	CLDCK	Nou used	—	—
63	FCLK	F-Clock	O	0
64	IPFLAG	H-Flag	O	0
65	FLAG	Flag Output	O	0
66	CLVS	Not used	—	—
67	CRC	Not used	—	—
68	DEMPH	Not used	—	—
69	RESY	Not used	—	—
70	IOSEL	(Connecting AVDD)	I	5.0
71	/TEST	(Connecting AVDD)	I	5.0
72	AVDD1	+5V Power Supply for Analog	—	4.9
73	OUTL	L-Channel Output	O	4.9
74	AVSS1	Ground for Analog	—	0
75	OUTR	R-Channel Output	O	4.9
76	RSEL	(Connecting AVDD)	—	5.0
77	CSEL	(Connecting Ground)	I	0
78	PSEL	(Connecting Ground)	I	0
79	MSEL	(Connecting Ground)	I	0
80	SSEL	+5V Power Supply	—	5.0

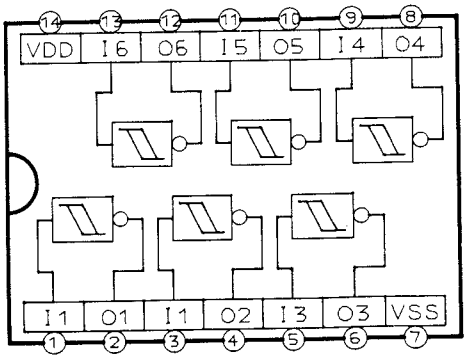
IC BLOCK DIAGRAM

<Main Block>

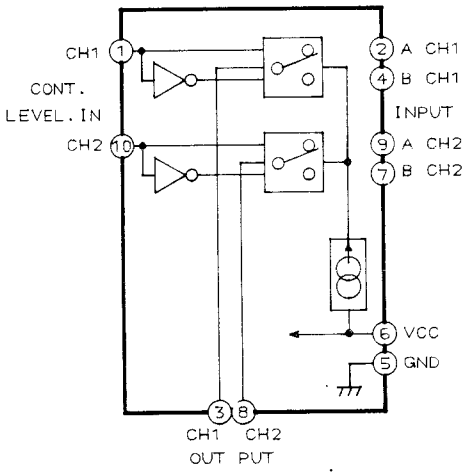
● IC201 YEAMM5218AP



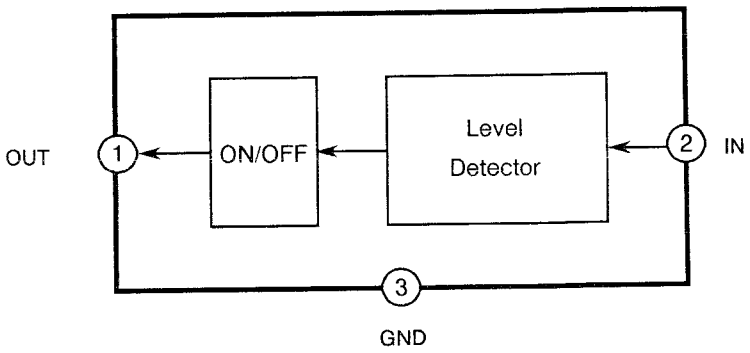
● IC203 YEAMC14584B



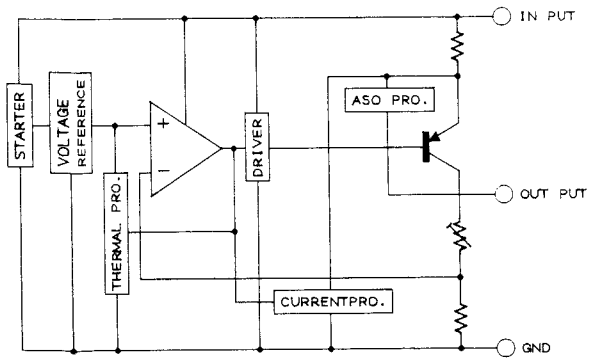
● IC202 YEAMTK15021



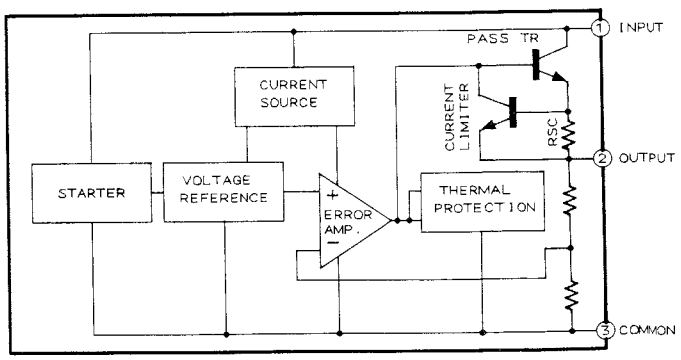
● IC711 MN1380R
● IC712 MN1380Q



● IC701 YEAMPC2410HF



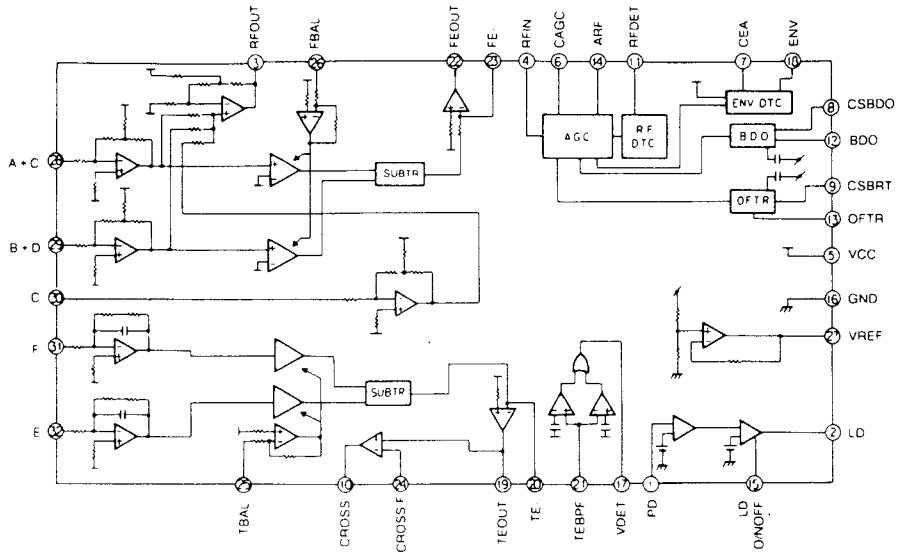
● IC702 AN78N05



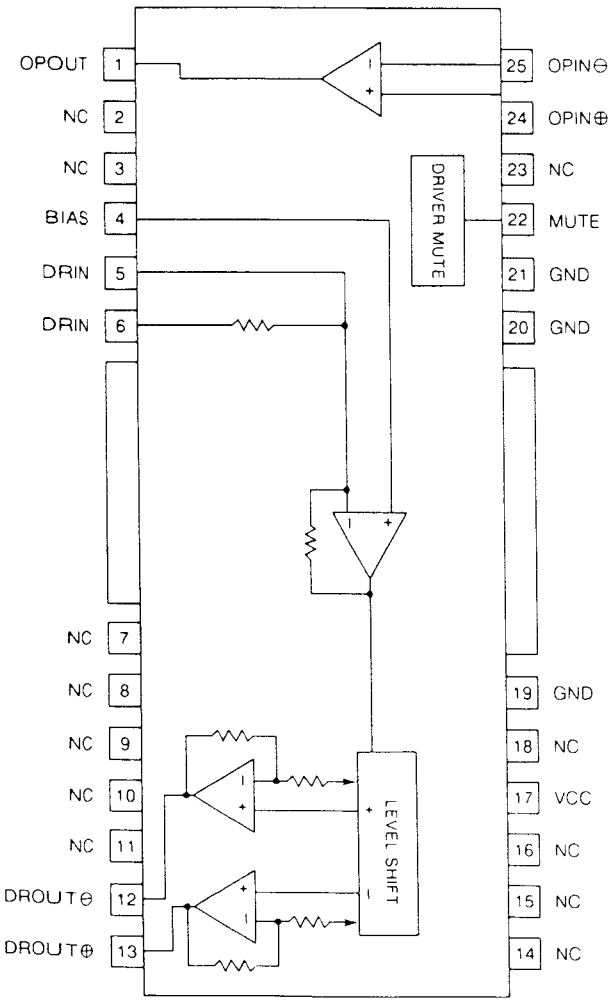
IC BLOCK DIAGRAM

< CD Servo Block >

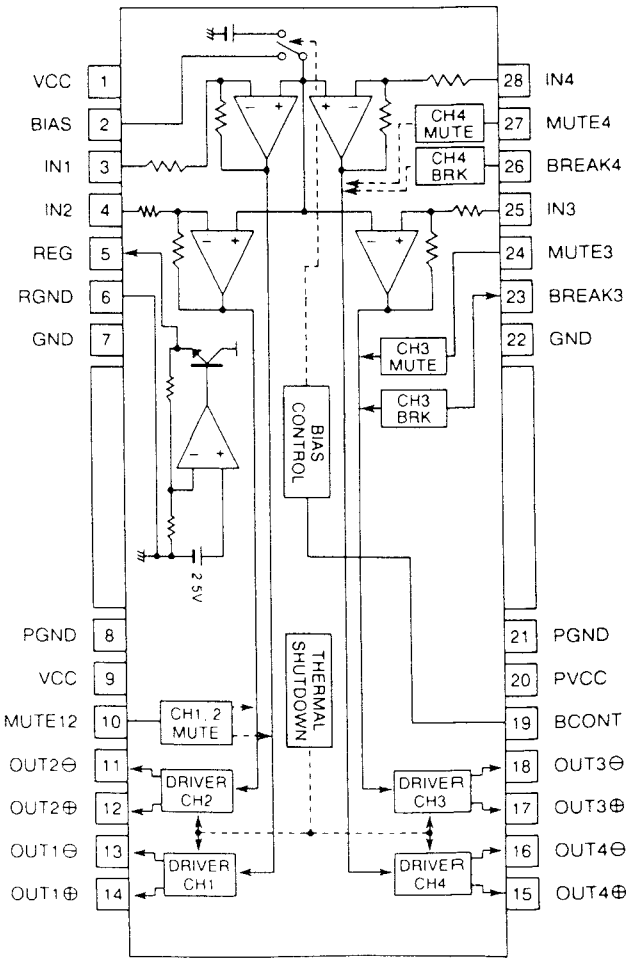
● IC101 YEAMBA6354FS



● IC901 YEAMBA6195FP



● IC951 YEAMBA6891FP



1 Replacement Parts List

Note :

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
5. "MCC" marks in remarks column are indicated supply parts of Matsushita Communication Industrial Corp. of America (MCC).

1.1. IC's and Transistors

[E2690A]

Ref. No.	Part No.	Part Name & Description	Remarks
IC201	YEAMM5218AP	IC	
IC202	YEAMTK15021	IC	
IC203	YEAMC14584B	IC	
IC601	C2BAFD000029	IC	
IC701	YEAMPC2410HF	IC	
IC702	AN78N05	IC	
IC711	MN1380R	IC	
IC712	MN1380Q	IC	
Q201	YEAN2SC3576	Transistor	
Q222	YEANDTA144ST	Transistor	
Q223	YEANDTC144ST	Transistor	
Q301	YEAN2SC3576	Transistor	
Q601	YEANC114YLT	Transistor	
Q602	YEANA114YLT	Transistor	
Q701	2SB1398QTA	Transistor	
Q702	YEAN2SC3068	Transistor	
Q711	YEAN2SD1513	Transistor	
Q712	YEAN2SC2785	Transistor	
Q771	YEAN2SC2785	Transistor	
Q772	YEANBP1F3PT	Transistor	
Q773	YEAN2SC2785	Transistor	
Q774	YEANBP1F3PT	Transistor	
Q775	YEAN2SC2785	Transistor	
Q776	YEANBP1F3PT	Transistor	

1.2. Diodes

[E2690A]

Ref. No.	Part No.	Part Name & Description	Remarks
D201	MA4068MHTA	Diode	
D301	MA4068MHTA	Diode	
D401	MA165	Diode	
D601	MA165	Diode	
D602	MA175WATAMC	Diode	
D603	MA165	Diode	
D604	MA165	Diode	
D611	YEADDSA3A2B	Diode	
D701	YEAD11ES2	Diode	
D702	MA165	Diode	
D703	YEADRD62JS2T	Diode	
D704	MA165	Diode	
D705	MA4068MHTA	Diode	
D771	YEADLS3366	LED	
D772	YEADLS3366	LED	
D773	YEADLS3366	LED	
D774	YEADLS3366	LED	
D775	YEADLS3366	LED	
D776	YEADLS3366	LED	
D777	YEADLS3366	LED	
D778	YEADLS3366	LED	
D779	YEADLS3366	LED	
D780	YEADLS3366	LED	
D781	YEADLS3366	LED	
D782	YEADLS3366	LED	
D783	YEADLS3366	LED	
D784	YEADLS3366	LED	

1.3. Capacitors

[E2690A]

Ref. No.	Part No.	Part Name & Description	Remarks
C201	YEE05X332M	Ceramic, 0.0033µF 16WV	
C202	ECEA1CKS100I	Electrolytic, 10µF 16WV	
C203	YEU05B221K	Ceramic, 220PF 50WV	
C204	YEU05B271K	Ceramic, 270PF 50WV	
C205	ECEA1CKS100I	Electrolytic, 10µF 16WV	
C206	ECEA1CKS100I	Electrolytic, 10µF 16WV	
C207	ECEA1CKS100I	Electrolytic, 10µF 16WV	
C208	ECEA1AKS470I	Electrolytic, 47µF 10WV	
C209	YEU05B221K	Ceramic, 220PF 50WV	
C210	ECEA1CSN100I	Electrolytic, 10µF 16WV	
C221	ECEA1CKS100I	Electrolytic, 10µF 16WV	
C301	YEE05X332M	Ceramic, 0.0033µF 16WV	
C302	ECEA1CKS100I	Electrolytic, 10µF 16WV	
C303	YEU05B221K	Ceramic, 220PF 50WV	
C304	YEU05B271K	Ceramic, 270PF 50WV	
C305	ECEA1CKS100I	Electrolytic, 10µF 16WV	
C306	ECEA1CKS100I	Electrolytic, 10µF 16WV	
C307	ECEA1CKS100I	Electrolytic, 10µF 16WV	
C308	ECEA1AKS470I	Electrolytic, 47µF 10WV	
C309	YEU05B221K	Ceramic, 220PF 50WV	
C310	ECEA1CSN100I	Electrolytic, 10µF 16WV	
C401	YEE05Y103N	Ceramic, 0.01µF 50WV	
C601	YEU05SL150J	Ceramic, 15PF 50WV	
C602	YEU05SL150J	Ceramic, 15PF 50WV	
C701	ECEA1CKS100I	Electrolytic, 10µF 16WV	
C702	YEE05Y103N	Ceramic, 0.01µF 50WV	
C703	ECEA1CKS470I	Electrolytic, 47µF 16WV	
C704	YEE05Y103N	Ceramic, 0.01µF 50WV	
C705	ECEA0JKS101	Electrolytic, 100µF 6.3WV	
C706	YEE05Y103N	Ceramic, 0.01µF 50WV	
C707	ECEA0JKS101	Electrolytic, 100µF 6.3WV	
C711	ECA1CM222B	Electrolytic, 2200µF 16WV	
C712	ECQB1H103JF	Plastic Film, 0.01µF 50WV	
C713	ECEA1CKS100I	Electrolytic, 10µF 16WV	
C714	ECEA0JKS331I	Electrolytic, 330µF 6.3WV	
C715	YEU05F104Z	Ceramic, 0.1µF 50WV	
C716	ECEA1HKS0R1I	Electrolytic, 0.1µF 50WV	
C717	EECS5R5T473	Electrolytic, 0.047FD 5.5WV	
C718	ECQB1H103JF	Plastic Film, 0.01µF 50WV	
C751	YEU05B101K	Ceramic, 100PF 50WV	
C752	YEU05B101K	Ceramic, 100PF 50WV	
C753	YEU05B101K	Ceramic, 100PF 50WV	
C754	YEU05B101K	Ceramic, 100PF 50WV	
C755	YEU05B101K	Ceramic, 100PF 50WV	
C756	YEU05B101K	Ceramic, 100PF 50WV	
C757	ECQB1H103JF	Plastic Film, 0.01µF 50WV	
C771	YEE05Y103N	Ceramic, 0.01µF 50WV	

1.4. Resistors

[E2690A]

Ref. No.	Part No.	Part Name & Description	Remarks
R201	ERDS2TJ102	Carbon, 1kΩ 1/4W	
R202	ERDS2TJ563	Carbon, 56kΩ 1/4W	
R203	ERDS2TJ103	Carbon, 10kΩ 1/4W	
R204	ERDS2TJ103	Carbon, 10kΩ 1/4W	
R205	ERDS2TJ561	Carbon, 560Ω 1/4W	
R207	ERDS2TJ102	Carbon, 1kΩ 1/4W	
R208	ERDS2TJ473	Carbon, 47kΩ 1/4W	
R209	ERDS2TJ470	Carbon, 47Ω 1/4W	
R210	ERDS2TJ103	Carbon, 10kΩ 1/4W	
R211	ERDS2TJ153	Carbon, 15kΩ 1/4W	
R212	ERDS2TJ123	Carbon, 12kΩ 1/4W	
R213	ERDS2TJ561	Carbon, 560Ω 1/4W	
R221	ERDS2TJ472	Carbon, 4.7kΩ 1/4W	
R222	ERDS2TJ473	Carbon, 47kΩ 1/4W	
R223	ERDS2TJ473	Carbon, 47kΩ 1/4W	
R301	ERDS2TJ102	Carbon, 1kΩ 1/4W	
R302	ERDS2TJ563	Carbon, 56kΩ 1/4W	
R303	ERDS2TJ103	Carbon, 10kΩ 1/4W	
R304	ERDS2TJ103	Carbon, 10kΩ 1/4W	
R305	ERDS2TJ561	Carbon, 560Ω 1/4W	
R307	ERDS2TJ102	Carbon, 1kΩ 1/4W	
R308	ERDS2TJ473	Carbon, 47kΩ 1/4W	
R309	ERDS2TJ470	Carbon, 47Ω 1/4W	
R310	ERDS2TJ103	Carbon, 10kΩ 1/4W	
R311	ERDS2TJ153	Carbon, 15kΩ 1/4W	
R312	ERDS2TJ123	Carbon, 12kΩ 1/4W	
R313	ERDS2TJ561	Carbon, 560Ω 1/4W	
R401	ERDS2TJ473	Carbon, 47kΩ 1/4W	
R402	ERDS2TJ563	Carbon, 56kΩ 1/4W	
R403	ERDS2TJ563	Carbon, 56kΩ 1/4W	
R404	ERDS2TJ473	Carbon, 47kΩ 1/4W	
R601	ERDS2TJ104	Carbon, 100kΩ 1/4W	
R602	ERDS2TJ104	Carbon, 100kΩ 1/4W	
R603	ERDS2TJ104	Carbon, 100kΩ 1/4W	
R604	ERDS2TJ104	Carbon, 100kΩ 1/4W	
R605	ERDS2TJ104	Carbon, 100kΩ 1/4W	
R606	ERDS2TJ104	Carbon, 100kΩ 1/4W	
R607	ERDS2TJ104	Carbon, 100kΩ 1/4W	
R608	ERDS2TJ473	Carbon, 47kΩ 1/4W	
R701	ERDS2TJ223	Carbon, 22kΩ 1/4W	
R702	ERDS2TJ103	Carbon, 10kΩ 1/4W	
R703	ERDS2TJ473	Carbon, 47kΩ 1/4W	
R704	ERDS1FJ681	Carbon, 680Ω 1/2W	
R705	ERDS1FJ681	Carbon, 680Ω 1/2W	
R706	ERDS1FJ101	Carbon, 100Ω 1/2W	
R707	ERDS2TJ103	Carbon, 10kΩ 1/4W	
R708	ERDS2TJ103	Carbon, 10kΩ 1/4W	
R711	ERDS1FJ470	Carbon, 47Ω 1/2W	
R712	ERDS2TJ822	Carbon, 8.2kΩ 1/4W	
R713	ERDS2TJ104	Carbon, 100kΩ 1/4W	
R714	ERDS2TJ474	Carbon, 470kΩ 1/4W	
R715	ERDS2TJ104	Carbon, 100kΩ 1/4W	
R716	ERDS2TJ104	Carbon, 100kΩ 1/4W	
R717	ERDS2TJ104	Carbon, 100kΩ 1/4W	
R718	ERDS2TJ103	Carbon, 10kΩ 1/4W	
R719	ERDS2TJ333	Carbon, 33kΩ 1/4W	
R720	ERDS2TJ1R0	Carbon, 1.0Ω 1/4W	
R751	ERDS2TJ102	Carbon, 1kΩ 1/4W	
R752	ERDS2TJ102	Carbon, 1kΩ 1/4W	
R753	ERDS2TJ102	Carbon, 1kΩ 1/4W	
R754	ERDS2TJ102	Carbon, 1kΩ 1/4W	
R755	ERDS2TJ102	Carbon, 1kΩ 1/4W	
R756	ERDS2TJ102	Carbon, 1kΩ 1/4W	
R757	ERDS2TJ104	Carbon, 100kΩ 1/4W	
R758	ERDS2TJ104	Carbon, 100kΩ 1/4W	
R771	ERDS2TJ103	Carbon, 10kΩ 1/4W	
R772	ERDS2TJ223	Carbon, 22kΩ 1/4W	
R774	ERDS2TJ103	Carbon, 10kΩ 1/4W	
R775	ERDS2TJ103	Carbon, 10kΩ 1/4W	
R776	ERDS2TJ103	Carbon, 10kΩ 1/4W	
R777	ERDS2TJ152	Carbon, 1.5kΩ 1/4W	
R778	ERDS2TJ152	Carbon, 1.5kΩ 1/4W	
R779	ERDS1FJ471	Carbon, 470Ω 1/2W	
R780	ERDS1FJ471	Carbon, 470Ω 1/2W	
R781	ERDS1FJ471	Carbon, 470Ω 1/2W	
R782	ERDS1FJ471	Carbon, 470Ω 1/2W	
R783	ERDS2TJ221	Carbon, 220Ω 1/4W	
R784	ERDS2TJ221	Carbon, 220Ω 1/4W	
R801	ERDS2TJ102	Carbon, 1kΩ 1/4W	
R802	ERDS2TJ102	Carbon, 1kΩ 1/4W	

1.5. Connectors

[E2690A]

Ref. No.	Part No.	Part Name & Description	Remarks
CJ401	YEAE0114TKCG	Connector, 14P	
CJ701	YEAEM2009S	Connector, 9P	
CN701	YEAE012774	Connector, 8P	
CN702	YEAE012773	Connector, 2P	
CN801	YEAE0102ASLC	Connector, 2P	
CN802	YEAE0102ASLC	Connector, 2P	
CN803	YEAE0103IWK	Connector, 3P	
CN804	YEAE0103IWK	Connector, 3P	
CP701	YEAE012772	Connector, 9P	

1.6. Electric Parts

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW801	EVQPVF05K	Switch	
SW802	EVQPVF05K	Switch	

CRYSTAL

Ref. No.	Part No.	Part Name & Description	Remarks
XL601	YEXL49U838TA	Crystal OSC	

CERAMIC FILTER

Ref. No.	Part No.	Part Name & Description	Remarks
CS701	YECCL55S222T	Noise Filter, 2200PF 100WV	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L701	ELC08D050	Coil	
L703	YETQ012G157	Coil	

RESISTOR NETWORKS

Ref. No.	Part No.	Part Name & Description	Remarks
RA601	EXBF7E104J	Conpo-Resistor	
RA602	EXBF7E104J	Conpo-Resistor	
RA603	EXBF5E104J	Conpo-Resistor	
RA604	EXBF7E104J	Conpo-Resistor	

1.7. Mechanical Parts

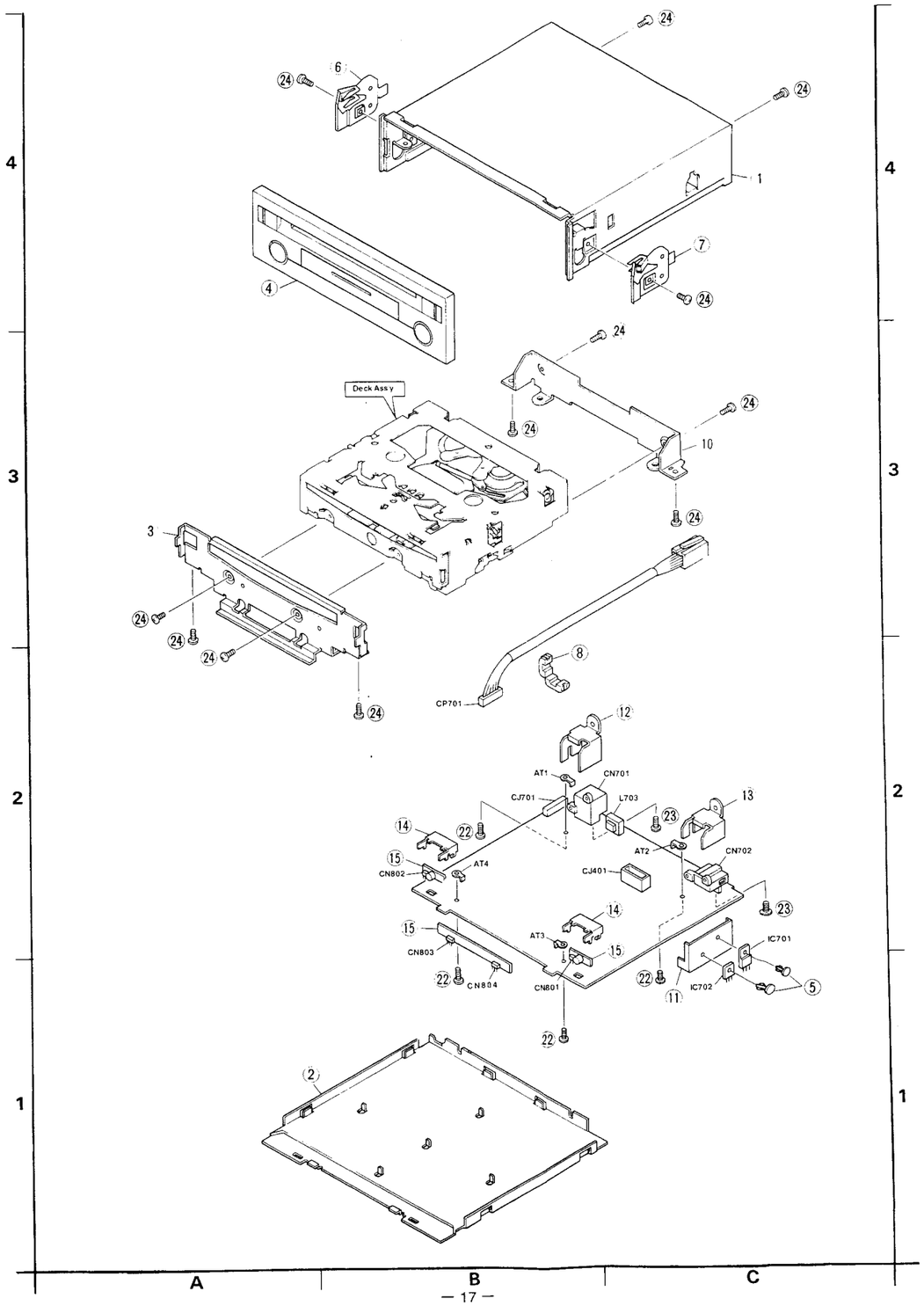
MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
AT1-4	YEAT03346A	Terminal	
1	YEFA011730	Chassis	(4-C)
2	YEFA05717	Bottom Cover	(1-B)
3	YEFA07441	Front Plate	(3-A)
4	YEFC025802	Escutcheon Ass'y	(4-B)
5	YEFJ05040	Color Rivet	(1-C)
6	YEFX0051900B	Spring(R)	(4-B)
7	YEFX0051901B	Spring(L)	(4-C)
8	YEFX007565	Cord Clamper	(2-B)
10	YEFX0214514	Rear Bracket,Deck	(3-C)
11	YEFX0214515	Bracket,IC701	(2-C)
12	YEFX0214518	Bracket,CN701	(2-B)
13	YEFX0214584	Bracket,CN702	(2-C)
14	YEFX0214585	Bracket,PCB	(2-B)

Ref. No.	Part No.	Part Name & Description	Remarks
15	YEP0PT2690Z9	PCB w/Component	RTL
22	YEJT03015	Tapping Screw, 3mm * 6mm	
23	YEJT03234	Tapping Screw	
24	YEJT03131	Tapping Screw, 2.6 * 5mm	

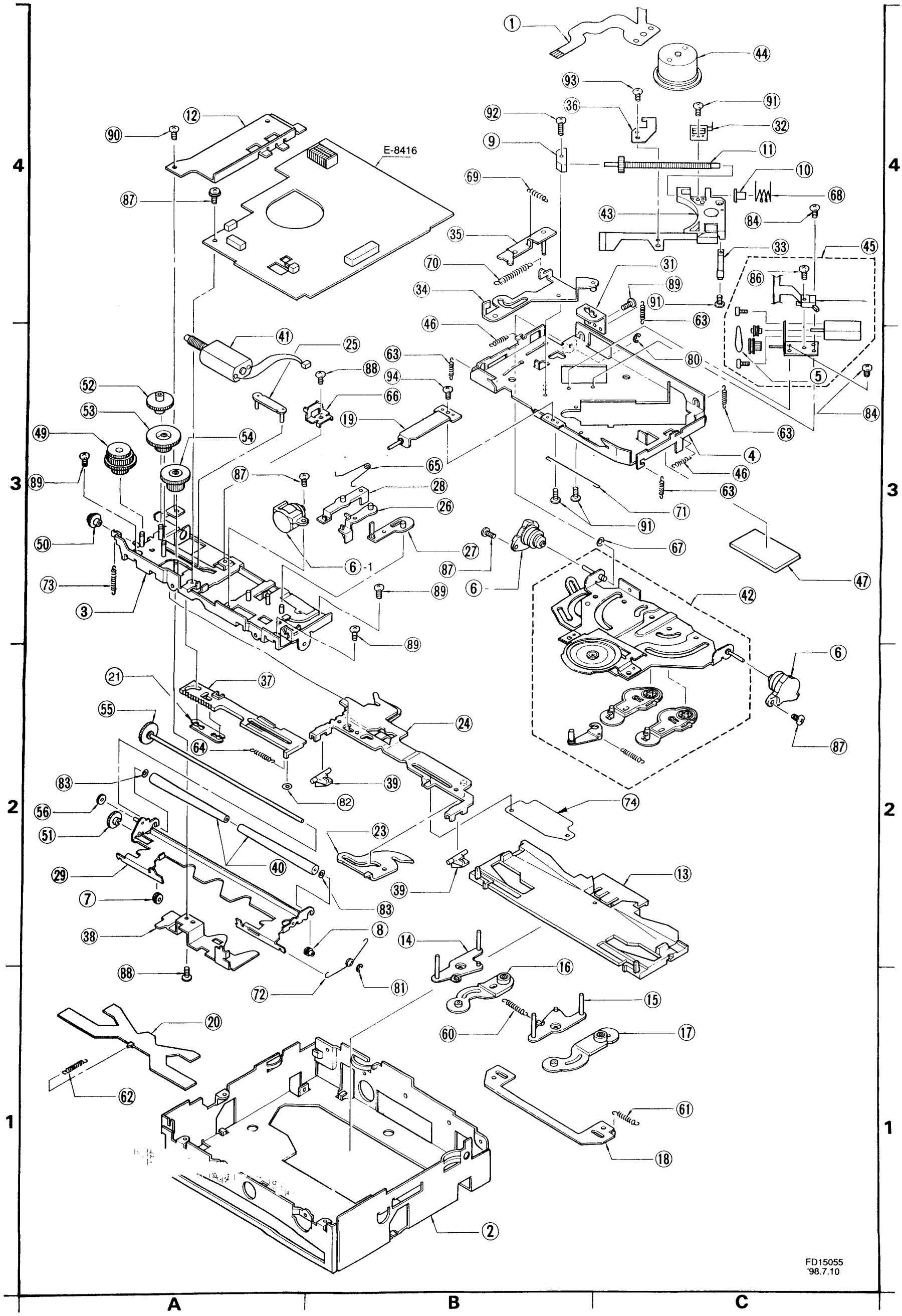
EXPLODED VIEW (Unit)

■ Numbers in ◯ are indicated REF.NO. in the REPLACEMENT PARTS LIST



EXPLODED VIEW (CD Deck)

■ Numbers in ◯ are indicated REF.NO. in the REPLACEMENT PARTS LIST



2 CD Playre Parts List

2.1. IC's and Transistors

[E8416]

Ref. No.	Part No.	Part Name & Description	Remarks
IC101	YEAMBA6354FS	IC	
IC401	MN662741RH	IC	
IC451	YEAM75XL8503	IC	
IC901	YEAMBA6195FP	IC	
IC951	YEAMBA6891FP	IC	
Q101	2SB766ATX	Transistor	

2.2. Diodes

[E8416]

Ref. No.	Part No.	Part Name & Description	Remarks
D401	MA151ATX	Diode	
D402, 451	MA151WKTX	Diode	

2.3. Capasitors

[E8416]

Ref. No.	Part No.	Part Name & Description	Remarks
C101 to 103	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C104	ECEH0JVC470F	Electrolytic, 47µF 6.3WV	
C105	ECSH0JC226CR	Tantalum, 22µFF6.3WV	
C106	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C107	YECUV1C105KX	Ceramic, 1µF 16WV	
C109	YECUS1H123KX	Ceramic, 0.012µF 50WV	
C110	YECUS1H152KX	Ceramic, 0.0015µF 50WV	
C111	YECUS1H471JM	Ceramic, 470PF 50WV	
C112	YECUS1H470JM	Ceramic, 47PF 50WV	
C113	YECUV2A102KX	Ceramic, 0.001µF 100WV	
C114	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C115	YECUX1C334KX	Ceramic, 0.33µF 16WV	
C116	YECUS1H273KX	Ceramic, 0.027µF 50WV	
C117	YECUS1H271JM	Ceramic, 270PF 50WV	
C118	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C120	YECUS1H272KX	Ceramic, 0.0027µF 50WV	
C121, 122	YECUS1H102KX	Ceramic, 0.001µF 50WV	
C123	ECGC0KB8R2RT	Electrolytic, 8.2µF 8WV	
C124	YECUS1H471JM	Ceramic, 470PF 50WV	
C125	YECUV1C105KX	Ceramic, 1µF 16WV	
C133	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C401	YECUV1E823KX	Ceramic, 0.082µF 25WV	
C402	YECUV2A123KX	Ceramic 0.012µF 100WV	
C403, 404	YECUV1C224KX	Ceramic 0.22µF 16WV	
C405	YECUS1E104ZF	Ceramic 0.1µF 25WV	
C406	ECEH0JVC470F	Electro c, 47µF 6.3WV	
C407	YECUS1E104ZF	Ceramic 1µF 25WV	
C408	ECEH0JVC470F	Electrol c, 47µF 6.3WV	
C409	YECUS1E104ZF	Ceramic uF 25WV	
C410	ECEH0JV101F	Electro 100µF 6.3WV	
C411	YECUS1E104ZF	Ceramic, 0 F 25WV	
C451	YECUV1H104ZF	Ceramic, 0.1uF 50WV	
C452	ECEH0JVC470F	Electrolytic, 47µF 6.3WV	
C453	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C454, 455	YECUS1H220JM	Ceramic, 22P 50WV	
C901	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C902	ECEH1CVC220F	Electrolytic, 22µF 16WV	
C903	YECUS1E333KX	Ceramic, 0.03 µF 25WV	
C951	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C952	ECEH1CVC220F	Electrolytic, 22µF 16WV	
C953	YECUV1H104ZF	Ceramic, 0.1µF 50WV	
C955	YECUV1C105KX	Ceramic, 1µF 16WV	

2.4. Resistors

[E8416]

Ref. No.	Part No.	Part Name & Description	Remarks
R101	ERJ8GEYJ101V	Chip, 100 ohms 1/8W	
R102	ERJ12YJ270H	Chip, 27 ohms 1/2W	
R103	ERJ8GEYJ333V	Chip, 33k ohms 1/8W	
R104	ERJ8GEYJ683V	Chip, 68k ohms 1/8W	
R105	ERJ8GEYJ333V	Chip, 33k ohms 1/8W	
R106	ERJ8GEYJ683V	Chip, 68k ohms 1/8W	
R107	ERJ6GEYJ103	Chip, 10k ohms 1/10W	
R108 to 110	ERJ8GEYJ224V	Chip, 220k ohms 1/8W	
R111	ERJ8GEYJ124V	Chip, 120k ohms 1/8W	
R112	ERJ8GEYJ102V	Chip, 1k ohms 1/8W	
R113	ERJ6GEYJ102	Chip, 1k ohms 1/10W	
R114	ERJ6GEYJ393	Chip, 39k ohms 1/10W	
R115	ERJ6GEYJ333	Chip, 33k ohms 1/10W	
R117	ERJ6GEYJ183	Chip, 18k ohms 1/10W	
R119	ERJ8GEYJ184V	Chip, 180k ohms 1/8W	
R120	ERJ6GEYJ103	Chip, 10k ohms 1/10W	
R401	ERJ6GEYJ473	Chip, 47k ohms 1/10W	
R402	ERJ6GEYJ823	Chip, 82k ohms 1/10W	
R403	ERJ8GEYJ105V	Chip, 1M ohms 1/8W	
R404	ERJ6GEYJ471	Chip, 470 ohms 1/10W	
R406	ERJ6GEYJ470	Chip, 47 ohms 1/10W	
R407	ERJ8GEYJ472V	Chip, 4.7k ohms 1/8W	
R408, 409	ERJ6GEYJ472	Chip, 4.7k ohms 1/10W	
R410	ERJ8GEYJ472V	Chip, 4.7k ohms 1/8W	
R411	ERJ6GEYJ334	Chip, 330k ohms 1/10W	
R412	ERJ8GEYJ472V	Chip, 4.7k ohms 1/8W	
R413	ERJ6GEYJ472	Chip, 4.7k ohms 1/10W	
R451, 452	ERJ6GEYJ563	Chip, 56k ohms 1/10W	
R453	ERJ6GEYJ473	Chip, 47k ohms 1/10W	
R454	ERJ8GEYJ472V	Chip, 4.7k ohms 1/8W	
R455	ERJ6GEYJ473	Chip, 47k ohms 1/10W	
R456	ERJ8GEYJ472V	Chip, 4.7k ohms 1/8W	
R457	ERJ8GEYJ473V	Chip, 47k ohms 1/8W	
R458, 459	ERJ6GEYJ472	Chip, 4.7k ohms 1/10W	
R460	ERJ6GEYJ473	Chip, 47k ohms 1/10W	
R461	ERJ8GEYJ472V	Chip, 4.7k ohms 1/8W	
R462, 463	ERJ8GEYJ471V	Chip, 470 ohms 1/8W	
R901	ERJ8GEYJ103V	Chip, 10k ohms 1/8W	
R902	ERJ8GEYJ333V	Chip, 33k ohms 1/8W	
R903	ERJ6GEYJ122	Chip, 1.2k ohms 1/10W	
R951	ERJ8GEYJ123V	Chip, 12k ohms 1/8W	
R952	ERJ8GEYJ472V	Chip, 4.7k ohms 1/8W	
R953	ERJ8GEYJ562V	Chip, 5.6k ohms 1/8W	
R954	ERJ8GEYJ123V	Chip, 12k ohms 1/8W	
R957	ERJ8GEYJ473V	Chip, 47k ohms 1/8W	
R958	ERJ8GEYJ274V	Chip, 270k ohms 1/8W	
R959	ERJ8GEYJ103V	Chip, 10k ohms 1/8W	
R961	ERJ8GEYJ104V	Chip, 100k ohms 1/8W	
R962	ERJ8GEYJ563V	Chip, 56k ohms 1/8W	
R963	ERJ8GEYJ272V	Chip, 2.7k ohms 1/8W	

2.5. Connectors

[E8416]

Ref. No.	Part No.	Part Name & Description	Remarks
CN101	YEAE5220715	Connector, 15P	
CN401	YEAE011TKCR	Connector, 14P	
CN901	YEAE5227106	Connector, 6P	
CN902	YEAE5326102	Connector, 2P	

2.6. Electric Parts

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW2	YEAS09248R	Switch	
AS1	YEAS23151A	Switch	

CRYSTALS

Ref. No.	Part No.	Part Name & Description	Remarks
XL401	YEXLCSTC169T	Crystal OSC	
XL451	YEXLCSAC419M	Crystal OSC	

COIL

Ref. No.	Part No.	Part Name & Description	Remarks
L101	YELTLM41P750	Coil	

2.7. Mechanical Parts

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
	YEP0PT8416A0	PCB w/Component	RTL
TP1	YEATSD00405	Earth Terminal	
1	YEAP2509A	Flat Cable	(4-C)
2	YEFA011606	Main Chassis	(1-B)
3	YEFA011537E	Front Chassis	(3-A)
4	YEFA011733	Suspension Chassis	(3-C)
5	YEFR03080	Belt	(3-C)
6	YEFS04626	Dumper (B)	(3-B) (2-C)
6-1	YEFS04625	Dumper (A)	(3-A)
7	YEFW04144	Shaft Holder (1)	(2-A)
8	YEFW04138	Shaft Holder (2)	(2-A)
9	YEFW04150	Shaft Holder(A), Feed Screw	(4-B)
10	YEFW04137A	Shaft Holder(B), Feed Screw	(4-C)
11	YEJT03211	Feed Screw Ass'y	(4-C)
12	YEFX018465	PCB Holder	(4-A)
13	YEFX236145E	Disc Guide	(2-C)
14	YEFX0461668E	Detect Lever (R)	(1-B)
15	YEFX0461669E	Detect Lever (L)	(1-B)
16	YEFX0461671A	Detect Arm (R)	(1-B)
17	YEFX0461672A	Detect Arm (L)	(1-C)
18	YEFX0461772	Slide Plate	(1-B)
19	YEFX018435	Dumper Bracket	(3-B)
20	YEFX249407A	Lock Control Plate	(1-A)
21	YEFX0461880	Link Fook	
23	YEFX0461654A	Lock Lever (L)	(2-B)
24	YEFX0461655A	Lock Lever (R) Ass'y	(2-B)
25	YEFX0461879A	Joint Lever Ass'y	(3-A)
26	YEFX0461660A	IN Switch Lever	(3-B)
27	YEFX0461661C	LOAD Switch Lever	(3-B)
28	YEFX0461662B	OUT Switch Lever	(3-B)
29	YEFX0461846	Feeder Arm Ass'y	(2-A)
31	YEFX234179B	Clamper Cam	(4-B)
32	YEFX9991406B	Feed Screw Holder	(4-C)
33	YEFX236144A	Travers Guide	(4-C)
34	YEFX0461883A	Clamper Lever Ass'y	(4-B)
35	YEFX0461876A	Change Lever (A) Ass'y	(4-B)
36	YEFX9991458A	FPC Holder	(4-C)
37	YEFX003735B	Clamper Rack	(2-A)
38	YEFX249408C	Lever Protection Cover	(2-A)
39	YEFX0461658A	Feeder Lever	(2-B)
40	YEFX218297	Rubber Roller	(2-A)
41	YEP0FX2519	Loading Motor Ass'y	(3-A)
42	YEP0FX2522	Clamper Unit	(3-C)
43	YESSZ3179	Optical Pick up Ass'y	(4-C)
44	YEP0FX3155	Spindle Motor Ass'y	(4-C)
45	YEP0FX2525	Travers Motor Ass'y	(3-C)
46	YEFX0052107	Suspention Spring	(3-B) (3-C)
47	YEFS011325	Pad	(3-C)
49	YEFX003741B	Loding Gear (1)	(3-A)
50	YEFX003742B	Loding Gear (2)	(3-A)
51	YEFX003731A	Loding Gear (3)	(2-A)
52	YEFX003732A	Clamper Gear (1)	(3-A)
53	YEFX003733	Clamper Gear (2)	(3-A)
54	YEFX003842	Clamper Gear (3)	(3-A)
55	YEP0FX2526	Roller Gear Ass'y	(2-A)
56	YEFX003762	Roller Gear (4)	(2-A)
60	YEFX0051994	Lever Spring (A)	(1-B)
61	YEFX0051995	Lever Spring (B)	(1-C)
62	YEFX0052032	Lever Spring	(1-A)
63	YEFX0051996	Suspension Spring	(3-B) (3-C)
64	YEFX0051987	Clamper Rack Spring	(2-A)
65	YEFX0051988C	Switch Lever Spring	(3-B)
66	YEFX0051997B	Loading Motor Spring	(3-B)
67	YEFX0051590	Vibration Spring	(3-C)
68	YEFX0051992	Thrust Adjustment Spring	(4-C)
69	YEFX0051998	Change Lever(A) Spring	(4-B)
70	YEFX0052000B	Clamper Arm Spring	(4-B)
71	YEFX0051991C	Side Pressure Spring	(3-B)
72	YEFX0052059	Feeder Arm Spring (2)	(1-B)
73	YEFX0051986	Feeder Arm Spring (1)	(3-A)
74	YEFX9991635	Lock Lever	
80	XUC15V	Retaining Ring, 1.5mm	(3-C)
81	XUC2V	Retaining Ring, 2mm	(1-B) (2-A)
82	YEJE01004	Retaining Ring 2mm	
83	YEJW04128	Polyslider, 3.1mm	(2-A) (2-B)
84	YEJS06097A	Screw, 2mm×2.5mm	(3-B) (4-C)
86	YEJS02018FZ	Screw, 1.6mm×7mm	(4-C)
87	YEJT03152	Tapping Screw, 2.6mm×5mm	
88	YEJT03132	Tapping Screw, 2.6mm×4mm	(1-A) (3-A)
89	YEJT03131	Tapping Screw, 2.6mm×5mm	(3-B)
90	YEJT03180	Tapping Screw, 2.6mm×6mm	(4-A)
91	XQN17+A25FX	Screw, 1.7mm×2.5mm	(3-B) (4-C)
92	XYN2+J10FX	Screw, 2mm×10mm	(4-B)

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